REMARKS

Upon entry of this Amendment, claims 1 and 3-17 are all the claims pending in this application. No new matter has been added.

Applicant thanks the Examiner for acknowledging the claim to foreign priority and for confirming that the certified copy of the priority document was received.

Applicant also thanks the Examiner for initialing the references listed on two forms PTO-1449 submitted with the Information Disclosure Statements filed on May 17, 1999, February 29, 2000 and June 8, 2001.

I. Claim Objections

Claim 4 is objected to under 37 CFR 1.75(c) as being an improper multiple dependent claim. Accordingly, claim 4 has been amended to place it in proper form. The Examiner is respectfully requested to withdraw the objection in view of the claim amendment.

II. Claim Rejections under 35 U.S.C. § 112, second paragraph

Claims 1-3 are rejected under 35 U.S.C. § 112, second paragraph as being indefinite. The Examiner asserts that it is not clear whether the ATM buffer device is being claimed as a separate unit, or an inclusion unit of the data I/O device or the data processing device. Applicant submits that claim 1, as amended, adequately describes the ATM buffer device, the data input/output device and the data processing device, and that in light of the specification, one of ordinary skill in the art would adequately understand the claimed subject matter which Applicant

regards as his invention. Accordingly, the Examiner is respectfully requested to reconsider and withdraw this rejection.

III. Rejection of claims 1-3 under 35 U.S.C. § 102(e)

Claims 1-3 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Soumiya et al. (U.S. Patent No. 5,696,764).

Claim 1 has been amended to include the limitations of claim 2. Amended claim 1 defines a new and unique combination which forms a multi-service-class switch. Included among the features of this new switch is an input/output device which is capable of inputting and outputting data regarding a service class of a buffer, such as a service category and a QOS class. For example, the data which a user inputs to the input/output device enables the user to assign a particular service class to a buffer, read a service class from a particular buffer to determine the service class assigned to that buffer, add new service class information, and delete old service class information. Applicant submits that the claimed combination is neither disclosed nor suggested by Soumiya.

In contrast, Soumiya discloses buffers having fixed, predetermined service class designations (Column 19, lines 6-22). As such, Soumiya has no need for an input/output device which inputs and outputs data regarding a buffer's service class. Soumiya merely classifies incoming cells into one of a plurality of predefined buffers according to the class designation of an incoming cell (Column 20, lines 45-51). Soumiya does not disclose or suggest the capability of inputting or outputting data regarding a service class, as recited in claim 1. Therefore,

Applicant submits that the claimed combination is neither disclosed nor suggested by Soumiya, and respectfully requests that the rejection be withdrawn.

Regarding claims 3 and 4, Applicant submits that claims 3 and 4 are not anticipated by Soumiya at least by virtue of their dependency from independent claim 1.

IV. Rejection of claims 5-6 under 35 U.S.C. § 102(b)

Claims 5-6 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Shon (U.S. Patent No. 5,499,238).

Claim 5 defines a new and unique combination which forms a service class defining method for defining a service class of a buffer within a switch. Included among the features of this new service class defining method is the ability to input data with regard to a service class of a buffer, which among other features, enables a particular mode to be detected based on the inputted data. For example, a data setting mode is detected when a user desires to assign a particular service class to one of the buffers, a data read mode is detected when a user desires to read a service class from a particular buffer to determine the service class assigned to that buffer, a data addition mode is detected when a user desires to add new service class information, and a data deletion mode is detected when a user desires to delete old service class information. Applicant submits that the claimed combination is neither disclosed nor suggested by Shon.

In contrast, Shon discloses buffers having fixed, predetermined service class designations. As such, Shon has no need for inputting data with regard to a service class. Shon merely classifies incoming cells into one of a plurality of predefined buffers according to the class type of the incoming cell (column 4, lines 20-24; column 5, line 66 through column 6, line

23). Shon does not disclose or suggest inputting data with regard to a service class, whereby a mode can be detected based on the inputted data, as recited in claim 5. Therefore, Applicant submits that the claimed combination is neither disclosed nor suggested by Shon, and respectfully requests that the rejection be withdrawn.

Claim 6 defines a new and unique combination which forms a service class defining method for defining a service class of a buffer within a switch. Included among the features of this new service class defining method is the ability to input data with regard to a service class and set the inputted data to a designated buffer, wherein the inputted data comprises at least one of a service category and a QOS class. Applicant submits that the claimed combination is neither disclosed nor suggested by Shon.

In contrast, Shon discloses buffers having fixed, predetermined service class designations. As Shon discloses buffers having fixed service class designation, Shon clearly cannot disclose or suggest the ability to input data such as a service category or QOS class, wherein the inputted data is assigned to the designated buffer. As discussed above, Shon merely classifies incoming cells into one of a plurality of predefined buffers according to the class type of the incoming cell (column 4, lines 20-24; column 5, line 66 through column 6, line 23). Shon does not disclose or suggest the ability to input service class data which is subsequently assigned to a designated buffer, as recited in claim 6. Therefore, Applicant submits that the claimed combination is neither disclosed nor suggested by Shon, and respectfully requests that the rejection be withdrawn.

V. Claims 7 and 8

Finally, Applicant notes that claims 7 and 8 are identified in the Office Action Summary as being rejected. However, nowhere in the Detailed Action are these claims mentioned. If the Examiner erroneously listed the claims in the Summary, and intended to indicate them to be allowable, Applicant is appreciative of such conclusion. If the Examiner intended to reject the claims, Applicant has not been informed as to whether the rejections are under Section 102 or Section 103 and what prior art is being applied.

Accordingly, Applicant submits that it is entitled to either an indication that the claims should have been considered allowable, or a statement from the Examiner as to why the claims are not patentable. To the extent that the Examiner decides to issue another Office Action in this case, Applicant respectfully submits that such action should not be final.

VI. New Claims

Applicant is adding new claims 9-17. Applicant submits that none of the cited prior art references disclose, teach, or suggest all of the features of these claims.

VII. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Submitted herewith is a Petition For Extension Of Time with fee and an Excess Claim Fee Payment Letter with fee.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

Kenneth Fields

Kenneth W. Fields
Registration No. P-52,430

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373
PATENT TRADEMARK OFFICE

Date: December 11, 2002

Attorney Docket No.: Q54398

APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Claim 2 is canceled.

The claims are amended as follows:

1. (Amended) A multi-service-class definition type [ATM] switch comprising:

a [an ATM] buffer device which comprises a buffer section having [consisting of] a plurality of buffers[, each of which is capable of defining a service class,] and a cell reading section for reading data from the buffer section;

a data input/output device which comprises a data input section for inputting data from an external source, a data output section for outputting the data, and a first data transceiver section for performing reception and transmission with respect to the data; [and]

a data processing device which comprises a second data transceiver for performing reception and transmission of data in connection with the first data transceiver section, a data analysis section for analyzing the data received [given] from the second data transceiver section, and a data reading/setting section; and

wherein the data input/output device is capable of inputting and outputting data regarding a service class of a buffer, such as a service category and a QOS class.

3. (Amended) A multi-service-class definition type [ATM] switch according to claim 1, [or 2] wherein the data processing device performs processing regarding reception, transmission and analysis on data regarding a service class, a buffer number and a request type, so that reading

and setting of the data can be made with respect to a prescribed buffer selected from the buffer section in response to a result of the processing.

4. (Amended) A multi-service-class definition type [ATM] switch according to claim 1 or 3, [any one of claims 1 to 3] wherein the data processing device is capable of adding and storing new data regarding at least one of a new service category and a new QOS class.

5. (Amended) A service class defining method for defining a service class for each of a plurality of buffers provided within a [an ATM] switch, comprising the steps of:

inputting data with regard to a service class containing a service category and a QOS class;

detecting a mode, which is one of a data setting mode, a data read mode, a data addition mode and a data deletion mode [and a data renewal mode], on the basis of a request type designated by the data;

defining a buffer, within the plurality of buffers, to be related to the service class of the data;

performing an operation on the data in association with the buffer in response to the detected mode; and

outputting content of the data.

6. (Amended) A service class defining method for defining a service class for at least one [each] of a plurality of buffers provided within a [an ATM] switch, comprising the steps of:

inputting data for one of the plurality of buffers [with regard to a service class containing a service category and a QOS class], wherein the data comprises at least one of a service category and a QOS class;

setting the data to a buffer whose buffer number is designated by the data within the plurality of buffers when a request type of the data corresponds to a data setting mode; and

outputting content of the data set to the buffer.

Claims 9-17 are added as new claims.